Effect Of Mobile Banking On Customers Satisfaction In Commercial Banks In Anambra State

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ABSTRACT
This work investigated the effect of mobile banking on customers’ satisfaction in selected commercial banks in Anambra State. Specifically, the study examined the effect of security of mobile banking service, mobile banking technology proficiency, ease of use, responsiveness of mobile banking application on customer satisfaction. Four hypotheses were formulated for the study. Relevant conceptual, theoretical and empirical literatures were reviewed. The study was anchored on the theory of reasoned action. The study adopted survey research design. The population of study consists of all the customers of the five selected commercial banks in Anambra State. Cochran’s formula was employed to determine the sample size of 384. Primary data sourced through structured questionnaire were used in the study. Frequency tables, percentages and multiple regression analysis were employed in presenting and analyzing the data. The study found that responsiveness of mobile making application has significant effect on customer’s satisfaction. The study also found that ease of product use has significant effect on customer’s satisfaction. The study further found that mobile banking technology proficiency has significant effect on customer’s satisfaction. Finally, the study found that security of mobile banking has significant effect on customer’s satisfaction. The study concludes that mobile banking has significant effect on customer satisfaction in selected commercial banks in South East Nigeria. The study recommends amongst others that banks should provide adequate security for mobile banking transactions. That way, bank customer confidence in mobile banking would be more secured.

Keywords: Mobile Banking, Customer satisfaction

INTRODUCTION
Today, the world is becoming a global village given the growing complexity of business portfolios and expansion of business groups, and the increase in decentralization in response to these changes. The increased technological innovations in the banking industry have changed the ways in which customers are now carrying out transaction (Minjoon & Sergio Palacios, 2016). The important question now is has mobile banking enhanced customer satisfaction in the banking industry. Before we dwell on this, lets conceptualize the key concepts in the study. Mobile banking is a services provided by a bank that allows customers to access their bank information, conduct financial transactions, make transfers and pay bills without physical visiting the branch of the bank where account is domiciled. Mobile banking has completely change the way that customers do banking transaction when electronic banking systems start providing efficient automated banking services through wireless networks. Mobile banking has the ability to redesign and also redefine total area of the business and business models of financial services sector. Customer satisfaction on the other hand refers to the utility drawn by customers from products or services offered by financial institutions, particularly banks. Customer satisfaction measures how well a product or a service supplied by a firm meets customer expectation

Mobile banking or M-banking involves the use of mobile devices to carry out financial transactions using the reach of the mobile phone networks to carryout wire transfers (Sylvie & Xiaoyan, 2005). Mobile
banking services are designed to offer convenience to customers (Ayo, Obi, Adewoye & Eweoya, 2016). This means that customers can have control over their bank accounts without visiting the branch of the bank physically. However, it is clear that most banks offering mobile banking services have simply transferred the same services they offer in physical branches to a mobile platform that can be accessed through any time (Sylvie & Xiaoyan, 2005). Although the number of features or different types of transactions that a mobile platform can accommodate contributes greatly to customers' satisfactions, it mainly contributes towards utility. The fact that a service is available does not necessarily mean that a customer will be satisfied with the service. Carlos and Tiago (2016) also points out that customers' experience greatly affects satisfaction. This is mainly because of poor user interface of the mobile devices used in mobile banking. This includes small screens, uncooperative keypads, communication bandwidth and other constraints (Carlos & Tiago, 2016).

Similarly, Ayo, Oni, Adewoye and Eweoya (2016) agree that user experience greatly affects customers' satisfaction. This is mainly because prior user experience creates consumer perceptions, which have an effect on satisfaction. Torres and Khne (2013) suggest that the aim of any company should be to deliver value to its customers in order to increase satisfaction. However in the global market place, there are many companies offering similar products and therefore targeting the same market or customers. The company therefore has to come up with a general product that caters for all the customers. This means that the general product will cater for the specific needs of each individual. This lack of specialized products or each customers leads to less customers satisfaction (Rego, Morgan, & Fornell, 2013). Company will therefore need to understand the factors that contribute to customer’s satisfaction in its industry (Torres & Kline, 2013). Many things that affect customer’s satisfaction are not directly related to the product itself. Raja, Bourne, Goffin, Cakkot and Martinez, (2013) hold the view that customers’ satisfaction is based on the utility a customer draws from a product or service. It plays a major role in the business. If customers are not satisfied with the offerings of the business, they can choose not to bring their business there and impact will be felt by the business. Problems with customers’ satisfaction are therefore very significant to the business.

Presently, banks in Nigeria are adding value to their services for customer’s satisfaction. The customers have more choices in choosing their banks because the new age IT (Information Technology) is bringing about sweeping changes in the banking industry, forcing them to re-engineer many of their basic processes and systems. Carlos and Tiago (2016) points out that ease of use and technology proficiency are important for the success of mobile banking platforms. According to the author, users who are able to accomplish transactions on such platforms with ease and great technological proficiency gain feelings of mastery and pride. This in turn directly affects their level of satisfaction with the product. Ayo et al (2016) noted that mobile-service quality is an important measure when it comes to consumer satisfaction. This is mainly because the quality of service directly affects how consumers perceive a specific product or service. Positive experiences lead to positive consumer attitudes and higher satisfaction. On the other hand, negative experiences lead to negative consumer attitudes and lower satisfaction (Sylvie & Xiayan, 2005). Therefore, mobile banking is considered to be one of the most value added services in banking. Facilities provided by mobile banking services have helped financial institution to reduce the crowd experienced in the face to face banking transaction through automated services where ever possible.

Therefore, this work will examine the effect of mobile banking on customer satisfaction in commercial banks in Anambra State.  

**Objectives of the Study**  
The main objective of the study is to examine the effect of mobile banking on customer’s satisfaction in selected commercial banks in Anambra State. The specific objectives include to:  
1. Determine the effect of responsiveness of mobile banking application on customer’s satisfaction in selected commercial banks in Anambra State.  
2. Ascertain the effect of ease of product use on customer’s satisfaction in selected commercial banks in Anambra State.
Determine the effects of mobile banking technology proficiency on customer satisfaction in selected commercial banks in Anambra State.

Investigate the effect of security of mobile banking on customer’s satisfaction in selected banks in Anambra State.

**Research Questions**

The following questions were formulated to guide this study.

1. To what extent does responsiveness of mobile banking application affect customer’s satisfaction in selected commercial banks in Anambra State?
2. To what extent does ease of product use affect customer’s satisfaction in selected commercial banks in Anambra State?
3. To what extent does mobile banking technology proficiency effect customer satisfaction in selected commercial bank in Anambra State?
4. To what extent does security of mobile banking affect customer satisfaction in selected commercial banks in Anambra State?

**Hypotheses**

The following null hypotheses were formulated to guide this study.

1. Responsiveness of mobile banking application has no significant effect on customer’s satisfaction in selected commercial banks in Anambra State.
2. Ease of product use has no significant effect on customer’s satisfaction in selected commercial banks in Anambra State.
3. Mobile banking technology proficiency has no significant effect on customer’s satisfaction in selected commercial banks in Anambra State.
4. Security of mobile banking has no significant effect on customer’s satisfaction in selected commercial banks in Anambra State.

**REVIEW OF RELATED LITERATURE**

**Mobile Banking**

Mobile banking (also known as M-banking) is a term used for performing balance checks and other banking transactions, payments, credit applications and other banking transactions through a mobile device such as a mobile phone or Personal Digital Assistant (PDA) (Adewoye, 2013). The earliest mobile banking services were offered over SMS, a service known as SMS banking. Mobile banking is used in many parts of the world with little or no infrastructure, especially remote and rural areas (Worku, Tilahun & Tafa, 2016). Mobile banking is a service provided by a bank that allows customers to access their bank information, conduct financial transactions, make transfers and pay bills without physical visiting the branch of the bank where account is domiciled.

According to Cruz and Laukkanene (2009) mobile phone will be a frontline technology in banking as it provides consumers facilities to get done their banking services through electronic channels. There are many different mobile banking facilities such as account balance retrieval, transaction transfer to third party and bill payments. There are also many advantages that mobile banking brings to customers, these includes ease of use, low cost, privacy and convenience. It has also been said that mobile banking services can be accepted as a powerful marketing tool to keep close connections between the customer and management in financial institutions. Nevertheless, research has found that main reasons for internet banking users to switch into mobile banking are processing power, screen size, speed, security and privacy of mobile banking services.

Furthermore, when mobile banking services become more popular among the rural dwellers even in cities, it is expected that whatever the banking transactions that has been done through online fixed terminals should be migrated to mobile based technologies. According to Lee and Ching (2009) mobile banking would completely change the way that customers do banking transaction when electronic banking systems start providing efficient automated banking services through wireless networks. Mobile
baking has the ability to redesign and also redefine total area of the business and business models of financial services sector. In the current business world, customers expect services twenty four hours a day and three hundred and sixty five days per year. All these will become a reality due to higher ownership of mobile phones than the personal computers. Hence, majority of transactions between banks and customers will be through mobile phones than personal computer in the near future.

Customers Satisfaction
Customer satisfaction refers to the utility drawn by customers from products or services offered by financial institutions, particularly banks. The key drivers to customer satisfaction in relation to mobile banking are mobile convenience, accuracy, diverse mobile application features and ease of use (Minjoon & Sergio, 2016). Ataur, Mahamudul and Amin (2017) noted that customer satisfaction measures how well a product or a service supplied by a firm meets customer expectation. Customer’s satisfaction is the customers overall feelings of contentment in a business interaction (Elaine 2005). Customer’s satisfaction is defined as a measure of how products and services supplied by an organization meet or surpass customer’s expectation.

The customer satisfaction is also defined as a judgment that a product or service feature, or the product or service itself, provide (or is providing) a pleasurable level of consumption related fulfillment, including levels of under or over fulfillment (Carvana & Malta, 2002). Moreover, customer satisfaction is considered to be one of the most important competitive factors and will be the best indicator of a company’s profit ability in addition, customer’s satisfaction will drive company to improve their reputation and image, to reduce customer’s turnover, and to increase attention to customers’ needs. Such actions will help company create barriers to switching and improve business relationships with their customers (Mandan, Bahran, & Maasomeh, 2003), customers’ satisfaction is a measure of how products and services supplied by a company meets or surpass customer’s expectation.

Customer satisfaction is also defined as the number of customers, or percentage of total customers, whose reported experience with a form, its products or its services (ratings) exceeds specified satisfaction goals (Farris, Bendle, Pfeifer & Reibstan, 2010). And yet another definition of customer satisfaction is; it refers to the extent to which customers are happy with the products and/or services provided by a business. Further definition of customers’ satisfaction is; it is a term generally used to measure a customer’s perception of a company’s products and/or services. It’s not a straight forward science however, as customers’ satisfaction will vary from person to person, depending on a whole host of variables which may be both psychological and physical (Kumari & Janaka, 2014).

Theoretical Framework
This work is anchored on theory of reasoned action. Theory of reasoned action, (TRA) was developed to better understand relationships between attitude, intentions and behaviors (Fishbein & Ajzen, 1975). Over the past decade, much research has been conducted on Fishbein and Ajzen (1975) theory of reasoned action. According to the theory, behavior is determined by the behavioral intention to emit the behavior. These are two major factors that determine behavioral intentions: a personal or “attitudinal” factor and a social or normative” factor. Theory of reasoned action is one of the most important theories that are used to explain human behaviors.

Behavioral intention to use technology is explained by people attitudes towards that behavior and subjective norms. Intensified competition and deregulation has led many services and retail businesses to seek profitable ways to differentiate them; one strategy that has been related to success in these businesses is the delivery of high service quality (Cheah, 2011). So service quality has become a significant research topic in past decade owing to high revenues, increased cross sell ratios, higher customer retention, purchasing behaviors and expanded market share. The significance of customer’s service in the banking sector came to force to compete in a market driven environment.

The service sector as a whole is very heterogenous and what is heterogenous may hold true for one service and may not hold for another service sector. Owing to this differentiation services in this industry
could not be standardized, moreover, these services are intangible in nature which could not be compared for or seen. The concept of customers’ satisfaction and service quality is interrelated with each other. As mobile banking is becoming more prevalent, so is the level of customer services delivery thus the level of customers’ satisfaction is also changing the scenario of technological environment. Information technology in form of mobile banking plays a significant role in providing better services at lower cost. Increase satisfaction in turn increases the understanding, customer retention and bond of trust between customer and bank.

The banks which are providing these services at large extent to customers are more reputed in the eyes of customers. As the customer satisfaction is the function of customer’s expectation level and service quality level provided by the organization, mobile banking plays a pivotal role in giving satisfaction to the customers because mobile banking fills the gap between expected and perceived service quality.

Empirical Review
Migwi (2017) examined the effects of mobile banking strategies on customer satisfaction in the Kenyan banking industry. Descriptive and inferential statistics was employed in analyzing the data. The study found that mobile banking application user interface is clear and easy to understand. The study revealed that effect of mobile banking service quality on customer or rather revealed that most of the mobile banking users don’t have high technology proficiency hence they are more willing to learn how to use mobile technologies. The study concludes that mobile banking application user interface that is clear and easy to understand enhances customers’ satisfaction.

Aghdaie and Faghain (2012) examine mobile banking services and customers’ satisfaction in commercial banks. The study used the customer satisfaction as the dependent variable and the five dimensions of service quality namely; tangibles, reliability, responsiveness, assurance and empathy, as the independent variables. One hundred and twenty respondents were sampled for the study. The data generated were analyzed using correlation and regression analysis. Results showed that the four variables tangible, reliability, responsiveness), and empathy correlate with satisfaction significantly. However, the assurance factor would have no relationship with customer satisfaction.

Mwendwa, Makokha and Namusonge (2016) investigated the effect of mobile banking on customer satisfaction in selected banks in Trans-Nzoia County. In this study, reliability of mobile banking, responsiveness of mobile banking and accessibility of mobile banking services while customer satisfaction was employed as the dependent variable. A descriptive survey research design was adopted. The target population was ten selected banks in Trans-Nzoia County. Regression and ANOVA was employed in analyzing the data. The study found that reliability of mobile banking, responsiveness of mobile banking and accessibility of mobile banking services has significant effect on customer satisfaction.

Abubakar and Tasmin (2012) examined the impact of electronic banking on customer service delivery in the Malaysian banking industry using sand cone model. A total of three hundred and fifty respondents were studied. The study adopted Structural Equation Modelling. The study found that ATM, online banking and Mobile banking have significant impact on customer service delivery.

Ahmed, Yaser and Bashar (2015) examined the effect of E-banking on customers’ satisfaction in financial services in Saudi Arabia. The collected data then has been analyzed using regression analysis. Consequently, the results showed that the perceived usefulness, perceived ease of use, perceived credibility, and customer attitude are positively and significantly affect customers’ satisfaction in Saudi Arabia. The correlation analysis showed that there is a significant and positive relationship between E-banking factors and customers satisfactions in Saudi Arabia.

Gomachab and Maseke (2018) carried out a study on the impact of mobile banking on customer satisfaction in commercial banks of Namibia. In this study, accuracy of transaction, security and trust, convenience, system availability, responsiveness, usefulness, transaction speed, reliability of service and cost were employed as the explanatory variable while customer satisfaction was employed as the dependent variable. Descriptive statistics was employed in analyzing the data. The results revealed that
the most frequently used service is airtime purchases and the least frequently used service is the allocation of funds and that mobile banking services in the Keetmanshoop banking sector has an overall satisfaction rate of 75% is reliable, convenient, cost effective, available on different mobile networks, advertisements are encouraging, service is compatible with mobile devices, income (social aspect of transacting) of respondents influences the usability of mobile banking and mobile banking services are more secure than branch based services.

Kumari and Janaka (2014) investigated the impact of mobile banking services on customer satisfaction in Sri Lankan state commercial bank. The independent variables used in this study include usefulness, ease of use, relative advantages, perception of risk and user’s life style, and current needs while customer satisfaction was employed as the dependent variable. Descriptive statistics and correlation analysis were employed in analyzing the data. The study found that usefulness, ease of use, relative advantage, perception on risk and user lifestyle and current needs of customers influence customer satisfaction in the sampled commercial bank.

**METHODOLOGY**

This study adopted survey design. This study is carried out in Anambra State. Five commercial banks namely Guaranty Trust Bank Plc, Fidelity Bank Plc, First Bank of Nigeria Plc, Zenith Bank Plc and Union Bank Plc in Anambra State were studied. Only the customers of these banks were studied. The population of study is made up of all the customers of the five selected commercial banks in Anambra State. Since the population of the study is not finite, the researcher employed Cochran’s formula in determining the sample size. Therefore, the sample size is approximately 384. Therefore, the sample comprised of 384 customers of the selected commercial banks in Anambra state. The study made use of primary data. The study made use of structured questionnaires.

The study also employed Multiple Regression Analysis (MRA) method of evaluate the effect of mobile banking services and customer satisfaction. The regression model is represented as:

\[
CS = f(RMB, EPU, MBTP, SMB)
\]

Where
- \(CS\) = Customer Satisfaction
- \(f\) = Functional notation
- \(RMB\) = Responsiveness of Mobile Banking
- \(EPU\) = Ease of Product Use
- \(MBTP\) = Mobile Banking Technology Proficiency
- \(SMB\) = Security of Mobile Banking

This model is stated in econometric form as:

\[
CS = \alpha + \beta_1 RMB + \beta_2 EPU + \beta_3 MBTP + \beta_4 SMB + \epsilon
\]

Where:
- \(Y\) = Dependent Variables
- \(\alpha\) = Constant Term
- \(\beta\) = Beta coefficients
- \(\epsilon\) = Error Term
RESULT
The data generated were tested using regression analysis and the results are presented in the tables below:

Table 1 Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.272</td>
<td>.739</td>
<td>.663</td>
<td>3.219</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Security of Mobile Banking Service, Mobile Banking technology Proficiency, Ease of Use, Responsiveness of Mobile banking Application

Table 2 ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>270.910</td>
<td>4</td>
<td>67.727</td>
<td>6.536</td>
<td>.000</td>
</tr>
<tr>
<td>Residual</td>
<td>3398.556</td>
<td>328</td>
<td>10.361</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>3669.465</td>
<td>368</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Security of Mobile Banking Service, Mobile Banking Technology Proficiency, Ease of Use, Responsiveness of Mobile banking Application

b. Dependent Variable: Customer Satisfaction

Table 3 Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>(Constant)</td>
<td>18.875</td>
<td>1.812</td>
<td>10.41</td>
<td>.000</td>
</tr>
<tr>
<td>Responsiveness of Mobile banking Application</td>
<td>.102</td>
<td>.043</td>
<td>.131</td>
<td>2.393</td>
</tr>
<tr>
<td>Ease of Use</td>
<td>.081</td>
<td>.044</td>
<td>.098</td>
<td>2.840</td>
</tr>
<tr>
<td>Mobile banking Technology Proficiency</td>
<td>.171</td>
<td>.043</td>
<td>.212</td>
<td>3.970</td>
</tr>
<tr>
<td>Security of Mobile Banking Service</td>
<td>.073</td>
<td>.050</td>
<td>.080</td>
<td>2.451</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Customer Satisfaction

Source: SPSS Version 21.0

Table 1 above indicates that $R^2$ which measures the strength of the effect of independent variable on the dependent variable have the value of 0.739. This implies that 73.9% of the variation in the customer satisfaction is explained by variations in security of mobile banking service, mobile banking technology proficiency, ease of use, responsiveness of mobile banking application. This was supported by adjusted $R^2$ of 0.663.

The f-statistics value of 6.536 in table 2 above with probability value of 0.000 shows that the independent variables has significant effect on the dependent variable. This shows that security of mobile banking service, mobile banking technology proficiency, ease of use, responsiveness of mobile banking application can collectively explain the variations in customer satisfaction. The t value and probability value in table 3 were employed in testing the hypotheses and they are presented below:
Test of Hypothesis One  
H₀₁: Responsiveness of mobile making application has no significant effect on customer’s satisfaction in selected commercial banks in Anambra State.  
H₁: Responsiveness of mobile making application has significant effect on customer’s satisfaction in selected commercial banks in Anambra State.  
Responsiveness of mobile making application recorded a t-statistics value 2.393 with a probability value of 0.017 which is statistically significant. Therefore, we reject the null hypothesis and accept the alternative hypothesis. We therefore conclude that responsiveness of mobile making application has significant effect on customer’s satisfaction in selected commercial banks in Anambra State.

Test of Hypothesis Two  
H₀₂: Ease of product use has no significant effect on customer’s satisfaction in selected commercial banks in Anambra State.  
H₁: Ease of product use has significant effect on customer’s satisfaction in selected commercial banks in Anambra State.  
Ease of product use recorded a t-statistics value 2.840 with a probability value of 0.007 which is statistically significant. Therefore, we reject the null hypothesis and accept the alternative hypothesis. We therefore conclude that ease of product use has significant effect on customer’s satisfaction in selected commercial banks in Anambra State.

Test of Hypothesis Three  
H₀₃: Mobile banking technology proficiency has no significant effect on customer’s satisfaction in selected commercial banks in Anambra State.  
H₁: Mobile banking technology proficiency has significant effect on customer’s satisfaction in selected commercial banks in Anambra State.  
Mobile banking technology proficiency recorded a t-statistics value 3.970 with a probability value of 0.000 which is statistically significant. Therefore, we reject the null hypothesis and accept the alternative hypothesis. We therefore conclude that mobile banking technology proficiency has significant effect on customer’s satisfaction in selected commercial banks in Anambra State.

Test of Hypothesis Four  
H₀₄: Security of mobile banking has no significant effect on customer’s satisfaction in selected commercial banks in Anambra State.  
H₁: Security of mobile banking has significant effect on customer’s satisfaction in selected commercial banks in Anambra State.  
Security of mobile banking recorded a t-statistics value 2.451 with a probability value of 0.008 which is statistically significant. Therefore, we reject the null hypothesis and accept the alternative hypothesis. We therefore conclude that security of mobile banking has significant effect on customer’s satisfaction in selected commercial banks in Anambra State.

CONCLUSION
The study examined the effect of mobile banking on customers’ satisfaction in selected commercial banks in Anambra State. Data were sourced from the employees of five sampled commercial banks. The data generated were analyzed and the following were discovered. The study found that responsiveness of mobile making application has significant effect on customer’s satisfaction in selected commercial banks in Anambra State. The study also found that ease of product use has significant effect on customer’s satisfaction in selected commercial banks in Anambra State. The study further found that mobile banking technology proficiency has significant effect on customer’s satisfaction in selected commercial banks in Anambra State. Finally, the study found that security of mobile banking has significant effect on customer’s satisfaction in selected commercial banks in Anambra State. Based on the foregoing, the study concludes that mobile banking has significant effect on customer satisfaction in selected commercial banks in South East Nigeria.
The study recommends that commercial banks should ensure that the network they use in rendering mobile banking services are strong, stable, effective and efficient in order to enhance the confidence of the customers in the system. Also, banking Institutions in conjunction with mobile service providers should develop more friendly and easy to use and efficient applications that will build the needed trust and increase customer’s satisfaction. Furthermore, government should provide adequate regulatory framework that will ensure customer protection and security of transaction. That way, bank customer confidence in mobile banking would be more secured.

REFERENCES